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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MAKI, STEVEN D

ART UNIT PAPER NUMBER

1733

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,691

Applicant(s)

TAYLOR, FREDRICK

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9-30-04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,8-12,15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,8-12,15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17-20, which depend on method claim 5, are ambiguous since the describe "The tire of ...". For example, claim 17 describes "The tire of Claim 5" whereas claim 5 describes "In a method of building ...". Are claims 17-20 tire claims or method claims?

- 3) Claims 17 and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 17 broaden claim 5 because claim 17 uses open language ("having") whereas claim 5 uses closed language ("consists").

Claim 18 broaden claim 5 because claim 18 uses open language ("comprising") whereas claim 5 uses closed language ("consists").

- 4) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5) Claims 8-12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain '870 (GB 2239870) in view of Japan '104 (JP 64-74104), Europe '137 (EP 708137) and Sandstrom et al (US 5216066).

Great Britain '870, Japan '104, Europe '137 and Sandstrom et al are applied as in paragraph 7 of the last office action dated 6-30-04 (paragraph 7 of the last office action dated 6-30-04 is incorporated herein by reference).

Applicant argues that the applied art does not teach the combination of components comprising applicant's non-marking tread cap as in claim 5 and further does not teach the ranges of the components comprising the tread cap as in claim 8. Applicant argues that the reference teach inconsistent tread compositions and inconsistent ranges or amounts of components. Applicant asserts that the basis of the rejection of claim 5 amounts to obvious to try. In response, the examiner makes the following comments:

Great Britain discloses a non-marking composition for a tire comprising elastomeric material, one or more filler substances and plasticiser (paraffinic oil, naphthenic oil or ester). In claim 5, "rubber oil" reads on paraffinic oil. Great Britain teaches using non aromatic oil such as paraffinic oil (rubber oil) so that floor surfaces will not be stained. See page 1 last paragraph, page 2 first full paragraph and last five lines of second paragraph on page 2. The claimed amount 7.5 to 12.5 parts of rubber oil would have been obvious and could have been determined without undue experimentation in view of Great Britain's teaching to use paraffinic oil (rubber oil) so that the tire does not stain the floor. This conclusion is consistent with Sandstrom which

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teaches using 9 parts non-aromatic oil. In example F of Sandstrom, the composition comprises 50 parts natural rubber, 50 parts EPDM, 45 parts carbon black and 9 parts non-aromatic oil (Naphthenic/paraffinic oil). See Tables I and V.

Sandstrom motivates one of ordinary skill in the art to use 10-80 EPDM / 20-70 parts EPDM such as 50 parts EPDM in Great Britain's nonmarking composition so that antioxidants which produce a staining tire tread can be eliminated. Avoiding a staining composition is highly desired by Great Britain since Great Britain wants to avoid staining floors with the tire. Sandstrom's preferred range of 20-70 parts EPDM substantially overlaps the claimed range of 20-50 parts EPDM. The amount of 50 parts EPDM falls within the claimed range of 20-50 parts EPDM.

As to 30-70 parts natural rubber and synthetic rubber, Great Britain and Sandstrom both teach using natural rubber and synthetic rubber (e.g. SBR). As to 30-70 parts, the optimum amount of natural rubber and synthetic rubber would have been obvious and could have been determined without undue experimentation. As guidance, Sandstrom teaches using (a) 0-50 parts low Tg rubber such as natural rubber (col. 2 lines 6-41) and (b) 10-60 parts high Tg rubber such as SBR (col. 1 lines 65-66, col. 2 lines 54-63).

With respect to carbon black and silica, Great Britain teaches using one or more fillers and thereby teaches using two types of fillers. What are two types of suitable fillers? Answer: Carbon black and silica. See Europe '137.

The claimed amount (11-60 parts) of carbon black and the claimed amount of silica (11-60) would have been obvious and could have been determined without undue

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experimentation in view of (a) Great Britain's teaching to use one or more fillers in the nonmarking composition and (b) Europe '137's teaching to use silica and carbon black in a 1:1 ratio. It is emphasized that Great Britain's teaching to use one or more fillers clearly instructs one of ordinary skill in the art that Great Britain's non marking composition is not limited to using only one filler (carbon black). See page 2 lines 5-6, page 6 lines 4 and 18-20. It is noted that the total amount of claimed filler is 22-120 parts. The total amount of filler (carbon black) in the example of Great Britain is 75 parts. The total amount of filler in Sandstrom is 40-120 parts (col. 7 lines 40-43). The total amount of filler in Europe is 20-150 parts, preferably 40-120 parts. This information was obtained during a partial oral translation of Page 2 lines 46-47 of Europe by a PTO translator. With respect to the total amount of filler being divided into 11-60 parts carbon black and 11-60 parts silica, Europe suggests a silica to carbon black ratio of 1:1.

With respect to applicant's comment that the rejection is based on four references, "[t]he criterion, however, is not the number of references, but what they would have meant to a person of ordinary skill in the field of the invention." In re Gorman 18 USPQ2d 1885, 1888 (CAFC 1991) (affirmance of thirteen reference rejection). Also see MPEP 2145, page 2100-160, Rev. 2, May 2004.

In the instant case, all of the applied prior art is directed to a nonmarking composition for a tire. Both Great Britain and Sandstrom teach using paraffinic oil (rubber oil) in a non-marking composition for a tire. The importance of using non-aromatic oil such as paraffinic oil is explained by Great Britain. Specifically Great Britain

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teaches using non-aromatic oil so that a tire having the composition will not stain the floor. Both Great Britain and Europe teach using two fillers with Europe providing the specific suggestion to use silica and carbon black in a volume ratio of 1;1 to 20:1. Finally, Sandstrom discusses the importance of using EPDM to produce a non-staining tire at col. 8 lines 28-35.

Applicant argues Europe discloses a rubber mixture containing no aromatic process oil. The examiner agrees that Europe discloses a rubber mixture containing no aromatic process oil. The examiner adds that Great Britain discloses a rubber mixture containing no aromatic process oil; Great Britain disclosing using paraffinic oil (rubber oil) instead of aromatic oil.

Applicant argues that Great Britain, Europe and Japan do not disclose the use of ethylene propylene rubber. More properly, each of Great Britain, Sandstrom and Europe and Japan teach a non marking composition. Moreover, Sandstrom provides strong motivation to use EPDM in non marking composition; it being noted again that Sandstrom teaches that the use of EPDM allows the elimination of antioxidants which produce a staining tire tread (see col. 8 lines 33-35).

As to Japan '104, applicant argues that Japan only teaches 10 parts natural rubber and synthetic rubber. Applicant is incorrect as Japan teaches using 100 parts natural rubber and synthetic rubber. See Derwent abstract.

Applicant argues that Japan only teaches 0-1 parts carbon black. More properly, Japan teaches that the total amount of filler in the non marking tread is 30-71 parts filler. It is acknowledged that Japan's tread is silica rich as only 0-1 parts carbon black is

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used. However, Europe teaches that the amount of silica in a non marking tread cap may vary from a volume ratio of 1:1 (equal amounts carbon black and silica) to 20:1 (silica rich non marking tread).

Applicant's arguments regarding "polybutadiene rubber" are not persuasive since (1) claim 5 fails to require "polybutadiene rubber", (2) Great Britain and Sandstrom teach polybutadiene and (2) Europe teaches conjugated diene rubber. At column 2, Sandstrom describes each of natural rubber, SBR, and polybutadiene as being a conjugated diene.

6) Claims 5 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain '870 (GB 2239870) in view of Japan '104 (JP 64-74104), Europe '137 (EP 708137) and Sandstrom et al (US 5216066) as applied above and further in view of Kirk-Othmer.

As to claims 5 and 16, Kirk Othmer is applied as in paragraph 8 of the last office action dated 6-30-04 (paragraph 8 of the last office action dated 6-30-04 is incorporated herein by reference). Claims 17-20 were amended to depend on claim 5 instead of claim 8. The discussion of claims 17-20 in paragraph 7 of the last office action are incorporated herein by reference.

As noted on page 7 lines 1-2 of the last office action, the obviousness conclusions regarding amounts are not required for claim 5. Claim 5 reads on using a nominal amount of silica such as 1 part silica.

Applicant's arguments regarding Kirk Othmer are not persuasive since Kirk Othmer evidences that the remaining ingredients are conventionally used in rubber

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compositions. For example, in section 3.4, Kirk Othmer lists known accelerators including mercatobenzothiazoles, sulfenamides and thiurams and then proceeds to state: "It is common practice in the rubber industry to use combinations of several accelerators in developing a cure system."

Remarks

7) Applicant's arguments filed 9-30-04 have been fully considered but they are not persuasive.

It is noted that the status identifier for claim 15 is incorrect. The status identifier for claim 15 should be --(currently amended)-- instead of "(currently amendment)".

8) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

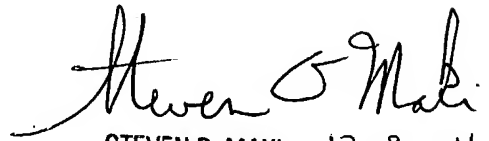
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9) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
December 8, 2004


STEVEN D. MAKI 12-8-04
PRIMARY EXAMINER
~~GROUP 1300~~
Av 1733